

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous version or listing of the claims:

Claim 1 (Currently amended): A burner for a heater for combustion of a hydrocarbon liquid, the burner comprising:

a combustion chamber having a combustion zone for combusting the hydrocarbon liquid and at least one tank portion for containing an amount of the hydrocarbon liquid, the or each tank portion being positioned adjacent the combustion zone and being arranged to feed the hydrocarbon liquid into the combustion zone, the or each tank portion being at least in part filled with a metallic filling material having a plurality of portions that pass through the interior of the or each tank portion,

wherein the metallic filling material is arranged for distribution of at least some of the heat that is developed in the combustion zone and is directed into the or each tank portion whereby at least one local heat maximum in the tank portion is reduced, thereby reducing the likelihood of ignition in the tank portion.

Claim 2 (Original): The burner as claimed in claim 1 wherein the filling material comprises more than one hundred particles which define spaces between them.

Claim 3 (Original): The burner as claimed in claim 1 wherein the filling material comprises a mesh.

Claim 4 (Original): The burner as claimed in claim 1 wherein the filling material comprises a mesh gauze.

Claim 5 (Original): The burner as claimed in claim 1 wherein the filling material comprises steel wool.

Claim 6: Cancelled.

Claim 7 (Previously presented): The burner as claimed in claim 1 wherein the burner is part of a fireplace.

Claim 8 (Previously presented): The burner as claimed in claim 1 further comprising combustion control means for controlling gas exchange of the combustion in a first combustion zone.

Claim 9 (Original): The burner as claimed in claim 8 wherein the control means comprises an opening that allows diffusion of oxygen into the combustion chamber and a closure for the opening.

Claim 10 (Previously presented): The burner as claimed in claim 9 wherein the combustion control means comprises a shutter that is arranged to adjust the opening so as to control the combustion in the combustion zone.

Claim 11 (Previously presented): The burner as claimed in claim 10 wherein the shutter is arranged to close the opening so as to extinguish a flame in the combustion zone.

Claim 12 (Original): The burner as claimed in claim 11 wherein the shutter is arranged so that, when the opening is closed, the lid portion overlaps the shutter.

Claim 13 (Previously presented): The burner as claimed in claim 1 further comprising spacers positioned adjacent an external portion of the burner and arranged to avoid direct contact between the burner and an item that supports the burner.

Claim 14 (Previously presented): The burner as claimed in claim 1 further comprising a tray in which the burner is positioned and which is arranged to avoid direct contact between the burner and an item that supports the burner.

Claim 15 (Previously presented): The burner as claimed in claim 13 wherein the item is combustible.

Claim 16 (Previously presented): The burner as claimed in claim 1 wherein the burner is arranged for positioning in an item so that at least a portion of the burner is positioned below a surface of the item.

Claim 17 (Previously presented): The burner as claimed in claim 1 wherein the burner is arranged for positioning in a fireplace.

Claim 18 (Previously presented): The burner as claimed in claim 1 wherein the burner is arranged for positioning in a furniture item.

Claim 19 (Previously presented): The burner as claimed in claim 1 wherein the combustion chamber further comprises a fuel inlet opening through which the hydrocarbon liquid may be filled into the or each tank portion of the combustion chamber.

Claim 20 (Previously presented): The burner as claimed in claim 8 wherein the fuel inlet opening is remote from the opening of the combustion control means.

Claim 21 (Previously presented): The burner as claimed in claim 20 wherein the fuel inlet opening comprises a closure.

Claims 22-23: Cancelled.

Claim 24 (Previously presented): The burner as claimed in claim 1 comprising two tank portions between which the combustion zone is positioned.

Claim 25: Cancelled.

Claim 26 (Previously presented): The burner as claimed in claim 1 wherein the burner comprises at least two tank portions and wherein the combustion zone is positioned between the at least two tank portions.

Claim 27 (Previously presented): A heater comprising the burner as claimed in claim 1.

Claim 28 (Currently amended): A burner for a heater for combustion of a hydrocarbon liquid, the burner comprising:

a combustion chamber having a combustion zone for combusting the hydrocarbon liquid and at least one tank portion for containing an amount of the hydrocarbon liquid, the or each tank portion being positioned adjacent the combustion zone and being arranged to feed the hydrocarbon liquid into the combustion zone, and a fuel inlet portion having a closure; and

a combustion control means for controlling gas exchange of the combustion zone through an gas exchange opening of the combustion chamber,

wherein the ~~closure of the fuel inlet~~ burner is arranged so that ~~filling of the fuel into the or each tank portion is only possible if the combustion control means closes at least a portion of the~~ fuel inlet opening is only fully open when the combustion control means closes at least a portion of the gas exchange opening of the combustion chamber.

Claim 29 (Currently amended): The burner as claimed in claim 28 wherein the combustion control means comprises a shutter for controlling the gas exchange through the gas exchange opening of the combustion chamber ~~and wherein the closure of the fuel inlet opening also includes a shutter.~~

Claim 30 (Currently amended): The burner as claimed in claim 29 wherein the shutter for controlling gas ~~and the shutter of the fuel inlet opening are coupled~~ also is arranged for closing the fuel inlet opening.

Claim 31 (Previously presented): The burner as claimed in claim 14 wherein the item is combustible.

Claim 32 (New): A burner for a heater for combustion of a hydrocarbon liquid, the burner comprising:

a combustion chamber having a combustion zone for combusting the hydrocarbon liquid and at least one tank portion for containing an amount of the hydrocarbon liquid, the or each tank portion being positioned adjacent the combustion zone and being arranged to feed the hydrocarbon liquid into the combustion zone, the or each tank portion being at least in part filled with a filling material having a plurality of portions that pass through the interior of the or each tank portion;

a combustion control means for controlling gas exchange of the combustion in a

first combustion zone, the control means comprising an opening that allows diffusion of oxygen into the combustion chamber and a shutter that is arranged to adjust the opening so as to control the combustion the combustion zone; and

a fuel inlet opening for filling the hydrocarbon liquid into the burner,

wherein the filling material is arranged for distribution of at least some of the heat that is developed in the combustion zone and is directed into the or each tank portion whereby at least one local heat maximum in the tank portion is reduced, thereby reducing the likelihood of ignition in the tank portion, and

wherein the burner is arranged so that, when the shutter of the combustion control means is fully open, the fuel inlet opening is closed and only when at least a portion of the combustion control means is closed, the fuel inlet opening is fully open.

Claim 33 (New): The burner of claim 32 wherein the burner is arranged so that when the shutter of the combustion control means is fully open, the shutter of the combustion control means closes the fuel inlet opening and only when at least a portion of the shutter of the combustion control means is closed, the fuel inlet opening is fully open.

Claim 34 (New): A burner for a heater for combustion of a hydrocarbon liquid, the burner comprising:

a combustion chamber having a combustion zone for combusting the hydrocarbon liquid and two tank portions for containing an amount of the hydrocarbon liquid, the combustion zone being positioned between the tank portions and the tank portions being arranged to feed the hydrocarbon liquid into the combustion zone, the tank portions being at least in part filled with a filling material having a plurality of portions that pass through the interior of the tank portions,

wherein the filling material is arranged for distribution of at least some of the heat that is developed in the combustion zone and is directed into the tank portions whereby at least one local heat maximum in the tank portions is reduced, thereby reducing the likelihood of ignition in the tank portions and wherein the tank portions are separated from the combustion zone by wall portions that comprise apertures to allow the fuel to penetrate from the tank portions into the combustion zone.